# A Mark of Assurance in Seed Treatments





You choose a seed treatment package to help ensure a successful season. In turn, you should feel assured that those seed treatments perform as expected and work well with the genetics you're planting. LumiGEN® seed treatments are exclusive to the seed brands of Corteva Agriscience™, and represent the high performing, industry leading seed applied technologies that are available on Pioneer® seeds genetics.

#### **Exclusive to Corteva Agriscience**

LumiGEN seed treatments are designed, verified and proven to work with Pioneer seeds genetics, helping farmers establish healthy, uniform crops and maximize productivity.



Designed for our genetics



Verified on our genetics



Proven in the field with our genetics

#### A Mark of Assurance in Seed Treatments

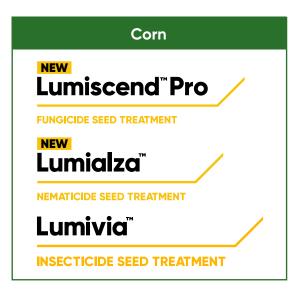
LumiGEN seed treatments are extensively tested across multiple years, geographies, and environments. LumiGEN seed treatments are selected and verified through our rigourous PASSER testing process that evaluates in 6 key areas: Plantability, Application, Seed Safety, Stewardship, Efficacy, and Regulatory. As a result, LumiGEN has become a trusted mark of assurance in seed treatments.

Look for the LumiGEN logo on your seed tag, and feel assured that you are using proven, industry-leading seed treatments that have been designed for your seed genetics.

# Lumiderm<sup>™</sup> INSECTICIDE SEED TREATMENT NEW Lumiscend<sup>™</sup>

# Soybeans Lumisena<sup>™</sup> FUNGICIDE SEED TREATMENT Lumiderm<sup>™</sup> INSECTICIDE SEED TREATMENT

**FUNGICIDE SEED TREATMENT** 







# LumiGEN® Canola Seed Treatments





LumiGEN® seed treatments are exclusive to the seed brands of Corteva Agriscience™, and represent the high performing, industry leading seed applied technologies that protect Pioneer® seeds genetics. LumiGEN seed treatments are designed, verified and proven to work with Pioneer seeds genetics, helping farmers establish healthy, uniform crops and maximize productivity.

The LumiGEN canola seed treatment portfolio provides proven, industry-leading protection from diseases and insects in canola.

Pioneer seeds foundation canola seed treatment package includes our premium fungicide and insecticide packages.

Premium Insecticide and Fungicide Package		
Product	Group	Disease and Insect Protection
Lumiderm™	28	<ul> <li>Enhanced crucifer and striped flea beetle protection</li> <li>Excellent early season cutworm control</li> <li>Exceptional early season seedling stand establishment, vigour and biomass</li> <li>Up to 35 days of protection through critical early stages</li> </ul>
Thiamethoxam	4	Early season flea beetle protection
NEW Lumiscend™	7	<ul> <li>A unique new active ingredient for powerful airborne blackleg protection</li> <li>Seed decay/pre-emergence damping-off, post-emergence damping-off, seedling blight and root rot</li> </ul>
Ipconazole Picoxystrobin Metalaxyl	3, 4, 11	<ul> <li>Seed and soil-borne blackleg</li> <li>Seed-borne alternaria</li> <li>Seed and seedling diseases: damping-off, seedling blight, seed rot, root rot caused by Rhizoctonia, Fusarium and Pythium spp.</li> </ul>







# LumiGEN® Canola Seed Treatments





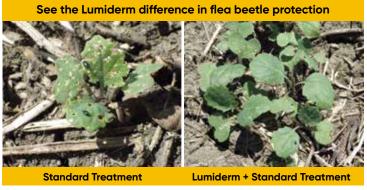
## **Lumiderm**

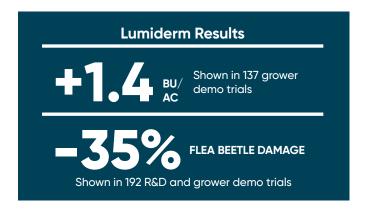
**INSECTICIDE SEED TREATMENT** 

Lumiderm™ insecticide seed treatment provides excellent plant protection against both flea beetles and cutworms in one convenient bag.

#### **Key benefits**

- Enhanced crucifer and striped flea beetle protection
- Excellent control of early season cutworms
- Excellent early season seedling stand establishment, vigour and biomass
- Up to 35 days of protection through the critical stages of seedling growth
- Group 28 chemistry provides an additional mode of effective action for flea beetle and cutworm control





Lumiderm protects canola from cutworm feeding for up to 35 days. Source: Lumsden, SK 22 Days After Seeding

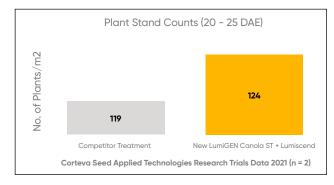


**FUNGICIDE SEED TREATMENT** 

New Lumiscend™ fungicide seed treatment adds powerful airborne blackleg protection to the new LumiGEN® canola disease package.

#### **Key benefits**

- A component of the NEW LumiGEN canola disease package is Lumiscend™ fungicide seed treatment, a unique new active ingredient for powerful airborne blackleg protection
- The New LumiGEN canola fungicide seed treatment contains four effective active ingredients for industry leading, broad spectrum disease protection



The information in this brochure is intended for use in for Western Canada.





**PIONEER**。

# LumiGEN® Soybean Seed Treatments





LumiGEN® seed treatments are exclusive to the seed brands of Corteva Agriscience™, and represent the high performing, industry leading seed applied technologies that protect Pioneer® seeds genetics. LumiGEN seed treatments are designed, verified and proven to work with Pioneer seeds genetics, helping farmers establish healthy, uniform crops and maximize productivity.

The LumiGEN soybean seed treatment portfolio provides proven, industry-leading protection from diseases and insects in soybeans.

Pioneer seeds **premium performance soybean seed treatment package** includes our premium fungicide package and Lumiderm<sup>™</sup> insecticide seed treatment. An inoculant package can be added for further protection.

Premium Fungicide and Foundation Insecticide Package			
Product	Group	Disease and Insect Protection	
LumiGEN FST with Lumisena™	3, 4, 11, 49	<ul><li>Phytophthora</li><li>Pythium</li><li>Rhizoctonia</li><li>Fusarium</li></ul>	
Stress Shield®	4	<ul> <li>Soybean aphid</li> <li>Bean leaf beetle</li> <li>Seedcorn maggot</li> <li>Wireworm</li> <li>European chafer</li> <li>Japanese beetle</li> </ul>	

Premium Insecticide Package				
Product	Group	Advanced Insect Protection		
Lumiderm™	28	<ul> <li>Bean leaf beetle</li> <li>Seedcorn maggot</li> <li>European chafer</li> <li>Masked chafer</li> <li>June beetle</li> <li>Wireworm</li> <li>Soybean aphid</li> <li>Cutworm</li> </ul>		

Inoculant Package		
Product	Group	Inoculation
Nodulator® PRO + Integral®	44	Prolongs rhizobia up to 225 days after application







### LumiGEN® Soybean Seed Treatments





#### **Lumisena**

**FUNGICIDE SEED TREATMENT** 

Lumisena™ fungicide seed treatment provides the best protection against phytophthora for healthier, more vigorous soybean stands and higher yield potential.

#### Protection against phytophthora

- Lumisena is the most advanced seed applied technology to protect against phytophthora
- İt is the only seed applied technology that delivers residual protection across multiple stages of the phytophthora pathogen's life cycle: preventative, eradicative, curative and antisporulant
- Lumisena is a group 49, a new class of chemistry for superior disease protection



#### More vigorous growth and enhanced emergence

Lumisena enhances emergence, vigour and root growth, improving soybean stands and maximizing yield potential.

# **Lumiderm**

**INSECTICIDE SEED TREATMENT** 

Lumiderm<sup>™</sup> insecticide seed treatment provides broad spectrum protection from early season insect pests including bean leaf beetle, soybean aphid and now registered for cutworms.

#### **Excellent Seedling Protection**

- Lumiderm provides soybean seedlings with extended protection against soybean aphid, bean leaf beetle, seedcorn maggot, European chafer, Japanese beetles, white grub, wireworm, and cutworm
- This protection delivers a uniform, healthy stand that maximizes yield potential



+1.5 BU,

In demo trials compared to standard IST + FST treatment.

Lumiderm complements Lumisena fungicide seed treatment and completes the LumiGEN soybean package. Add Lumiderm to maximize your soybean protection.

Lumiderm Target Pest:
Bean Leaf Beetle
Ontario Soybean Plot Site

BLB Damage

FST = Fungicide Seed Treatment IST = Insecticide Seed Treatment FST only

Standard IST + FST

Lumiderm + Lumisena + FST





# LumiGEN® Corn Seed Treatments





LumiGEN® seed treatments are exclusive to the seed brands of Corteva Agriscience™, and represent the high performing, industry leading seed applied technologies that protect Pioneer® seeds genetics. LumiGEN seed treatments are designed, verified and proven to work with Pioneer seeds genetics, helping farmers establish healthy, uniform crops and maximize productivity.

The LumiGEN corn seed treatment portfolio provides proven, industry-leading protection from disease, insects and nematodes in corn.

Pioneer seeds **premium performance corn seed treatment package** includes our premium insecticide, fungicide and nematicide seed treatment. The premium high-rate insecticide package also includes our premium fungicide and premium nematicide.

Foundational Insecticide, Premium Fungicide and Premium Nematicide Package		
Product	Group	Disease and Insect Protection
<b>NEW</b> Lumiscend™ Pro	4, 7, 22	Pythium, Rhizoctonia, Fusarium, Corn head smut
Ipconazole	3	
<b>NEW</b> Lumialza™		Key nematode species including sting, needle, lance, stubby-root, root-knot, dagger and lesion
Clothianidin	4	Wireworm, European chafer, Seedcorn maggot

Premium High-Rate Insecticide Package for High Wireworm Pressure Locations		
Product	Group	Disease and Insect Protection
Lumivia™	28	Wireworm, White grub, Seedcorn maggot, Black cutworm
Clothianidin	4	Soil insect pests listed above including wireworm







# LumiGEN® Corn Seed Treatments







**FUNGICIDE SEED TREATMENT** 



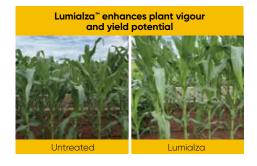
**NEMATICIDE SEED TREATMENT** 

New Lumiscend™ Pro delivers multi-mode of action protection of early season diseases, adding a new level of protection against rhizoctonia and pythium species.

Lumialza™ nematicide seed treatment is a biological nematicide that shields corn roots from harmful nematodes for over 80 days while cooperating with beneficial organisms to enhance crop vigour and yield potential.

#### **Key benefits**

- New Lumialza™ nematicide seed treatment is a biological nematicide that provides protection from key yield-robbing nematodes while cooperating with beneficial organisms for improved soil health
- Lumialza provides over 80 days of protection creating a large zone of protection, encompassing the entire area of root growth including lower, mid and upper root zones
- Enhances plant vigour and yield potential by creating an optimal environment for root growth, crop development & uniformity



### Lumivia<sup>™</sup>

**INSECTICIDE SEED TREATMENT** 

#### Key benefits.

- Outstanding protection against key early season corn insect pests
- Provides seedling protection to develop uniform and healthy stands that maximize yield potential
- Simplifies your seed treatment decision
- Offers a favourable environmental profile

Lumivia™ insecticide seed treatment delivers excellent broad-spectrum protection on key early season corn insect pests. Adding Lumivia completes the LumiGEN corn package by providing premium insect protection.













For more information on LumiGEN® seed treatments, ask your seed supplier or visit corteva.ca/contact to find your local Pioneer Territory Manager.

**For canola**, the Premium Fungicide and Insecticide Package includes inpyrfluxam, ipconazole, picoxystrobin, metalaxyl, cyantraniliprole and thiamethoxam.

**For soybeans**, the Premium Fungicide and Foundation Insecticide Package contains oxathiapiprolin, penflufen, prothioconazole, metalaxyl and imidacloprid. The Premium Insecticide Package contains cyantraniliprole. The Inoculant Package contains Bradyrhizobium japonicum, bacillus subtilis.

**For corn**, the Premium Fungicide, Premium Nematicide and Foundational Insecticide Package includes Indiflin, Metalaxyl, Ethaboxam, Ipconazole, B. amyloliquefaciens PTA-4838 and clothianidin. The High-Rate Insecticide Package includes chlorantraniliprole and clothianidin.

Components of LumiGEN:

Nodulator® PRO + Integral® (BASF); Lumisena™, Lumiderm™, Lumivia™, Lumialza™, Lumiscend™, Lumiscend™ Pro (Corteva Agriscience™)



